

Glossary and Basic Terminology

Principles of Computing

Fall 2024

Contents

B	2
C	2
F	2
G	2
I	2
J	2
L	2
M	3
O	3
P	3
R	3
S	3
T	3
U	3
V	3
W	4
Z	4

B

- **bash**: The Bourne-Again Shell, the default shell on Linux and the most popular shell program in the world. Based on **sh** and released in 1989.

C

- **closed-source software**: Software whose source code is *not* freely available from the developers.
- **CLI**: Command-Line Interface. A method of interacting with an application based around executing text-based commands. Implemented using a **REPL**. Commonly requires only a keyboard.

F

- **fish**: A user-friendly **shell** program.
- **FOSS**: **Free** and **Open-Source** Software.
- **free software**: Software that is distributed under a license that permits running the software for any purpose, as well as studying, modifying, and redistributing it.
- **freedom-respecting software**: See the entry on **free software**.

G

- **GUI**: Graphical User Interface. A method of interacting with an application by using visual symbols, metaphors, gestures, or pointing. Commonly involves the use of a mouse, touchpad, touch screen, or controller.
- **GNU**: GNU's Not **UNIX**. A massive **open-source** software project founded by Richard Stallman.
- **GNU GPL**: The General Public License, a very popular public software license made by Richard Stallman.

I

- **IPython**: A **command-line interface** for **Python**.
- **IDE**: Integrated Development Environment. A text editor with features that facilitate software development.

J

- **Jupyter**: An open-source software project that extends **IPython** to the Julia and R programming languages.

L

- **libre software**: See the entry on **free software**.
- **Linux**: A large family of **open-source**, **UNIX-like** operating systems based on using **GNU**.

M

- **macOS**: A **UNIX-like operating system** developed by Apple and originally called Mac OS X.

O

- **open-source software**: Software that is distributed along with the source code that produced the software.
- **OS**: Operating System
- **OSS**: **Open-Source** Software.

P

- **POSIX**: Portable Operating System Interface
- **Python**: An interpreted, dynamically typed programming language

R

- **RAM**: Random Access Memory. Where all currently-running processes store their data.
- **recursion**: See the entry on **recursion**.
- **REPL**: Read-Evaluate-Print Loop.

S

- **sh**: The Bourne **shell**, precursor to **bash** and released in 1979.
- **shell**: A command-line interface for interacting with the **OS**.

T

- **terminal**: An application that invokes and manages a **shell**.

U

- **UNIX**: The first *portable operating system* and the foundation for what would eventually become **Linux**.

V

- **VSCode**: An incredibly popular **IDE** developed by Microsoft.
- **VSCodeium**: An **open-source** version of the popular **VSCode IDE** with telemetry disabled by default.

W

- **Windows**: An [operating system](#) made by Microsoft.

Z

- **zsh**: Z shell, the default [shell](#) on [macOS](#).